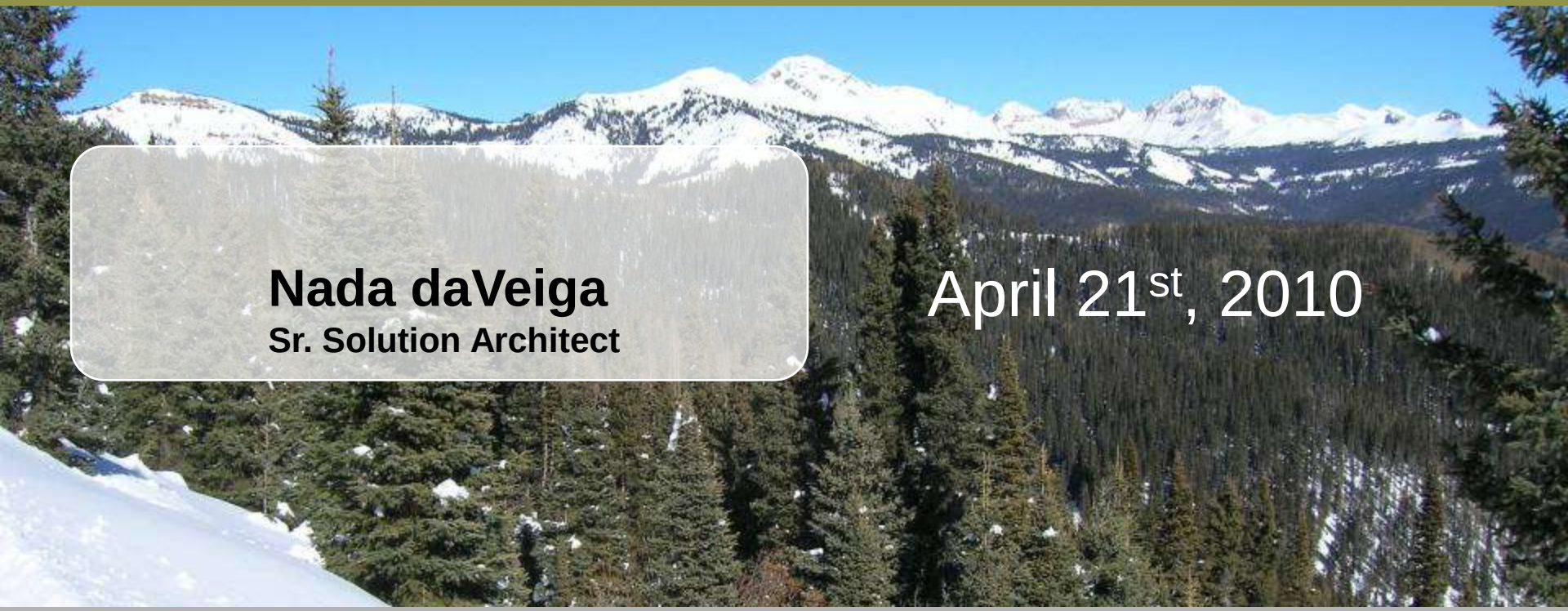
Removing the Constraints to Quality and Agility



Nada daVeiga
Sr. Solution Architect

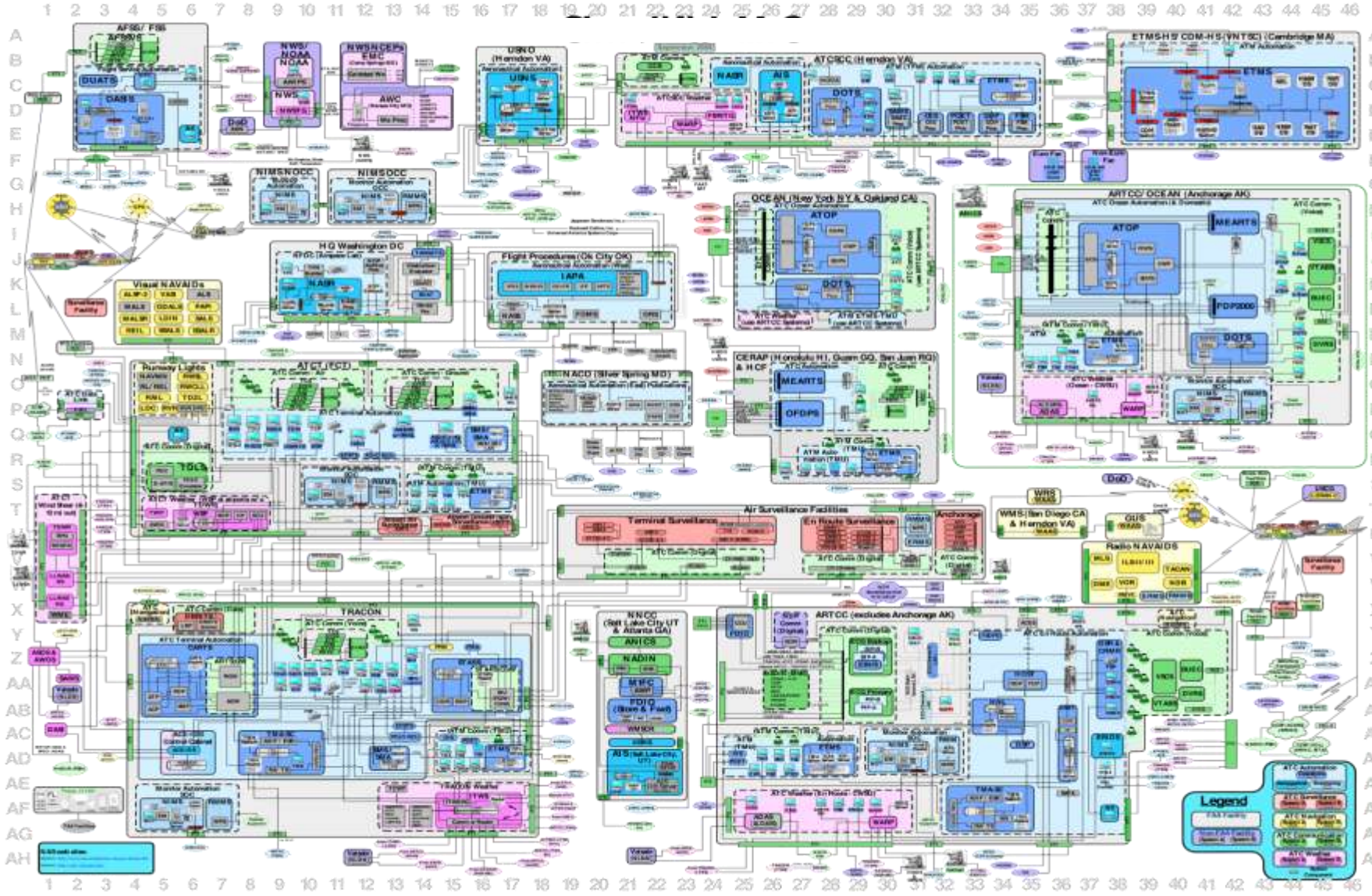
April 21st, 2010

iTKO LISA™

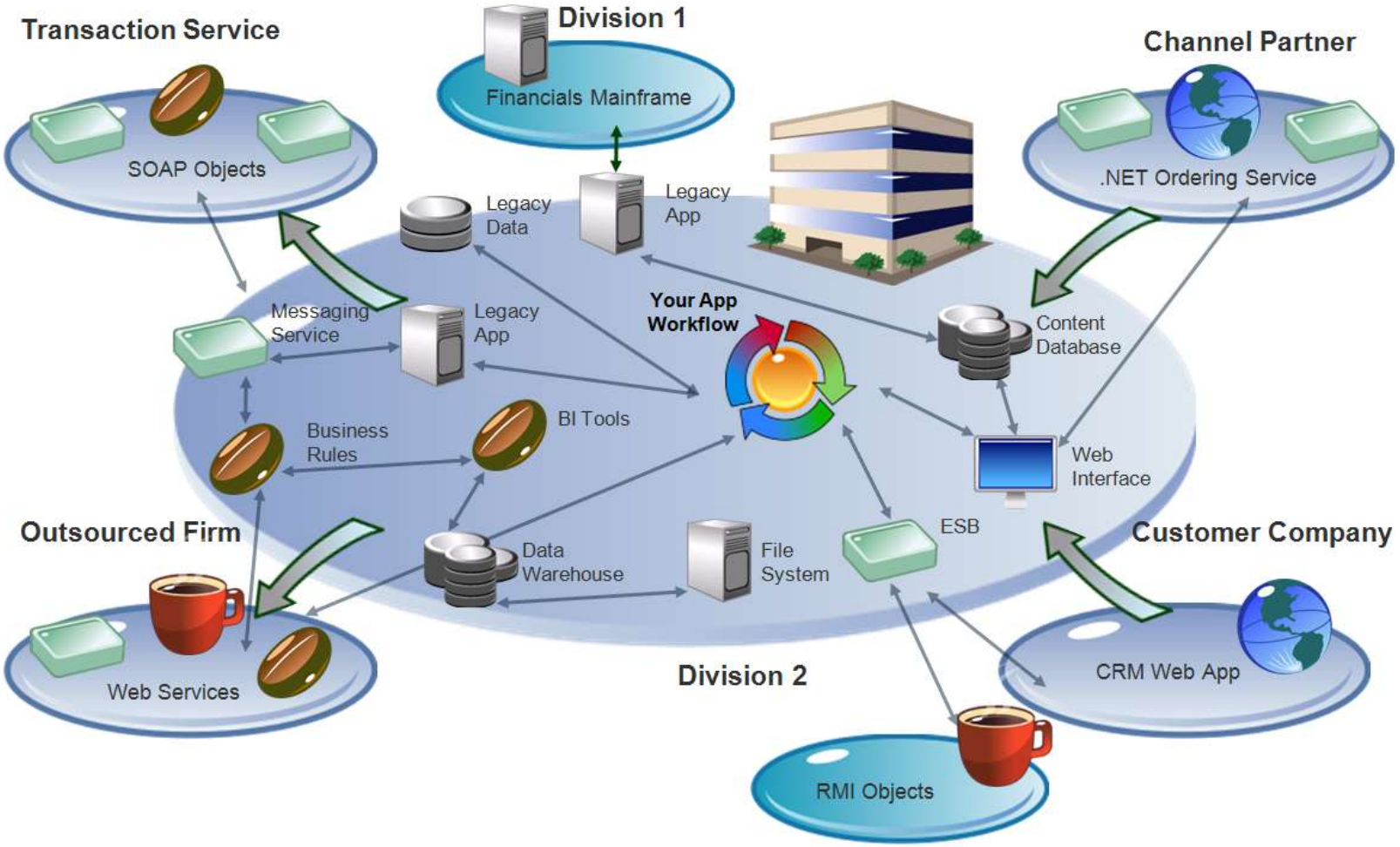
Reducing Risk in Today's Complex Environments

- ***Today's Systems and the Software Development Lifecycle?***
- Change? Why do we need it?
- SOA
  - Perceived benefits of a Services Oriented Approach.
  - Where is all my value?
- Bottlenecks in the process?
  - How can I remove them and realize my benefits?

What motivates us? Solving problems for architectures like these….

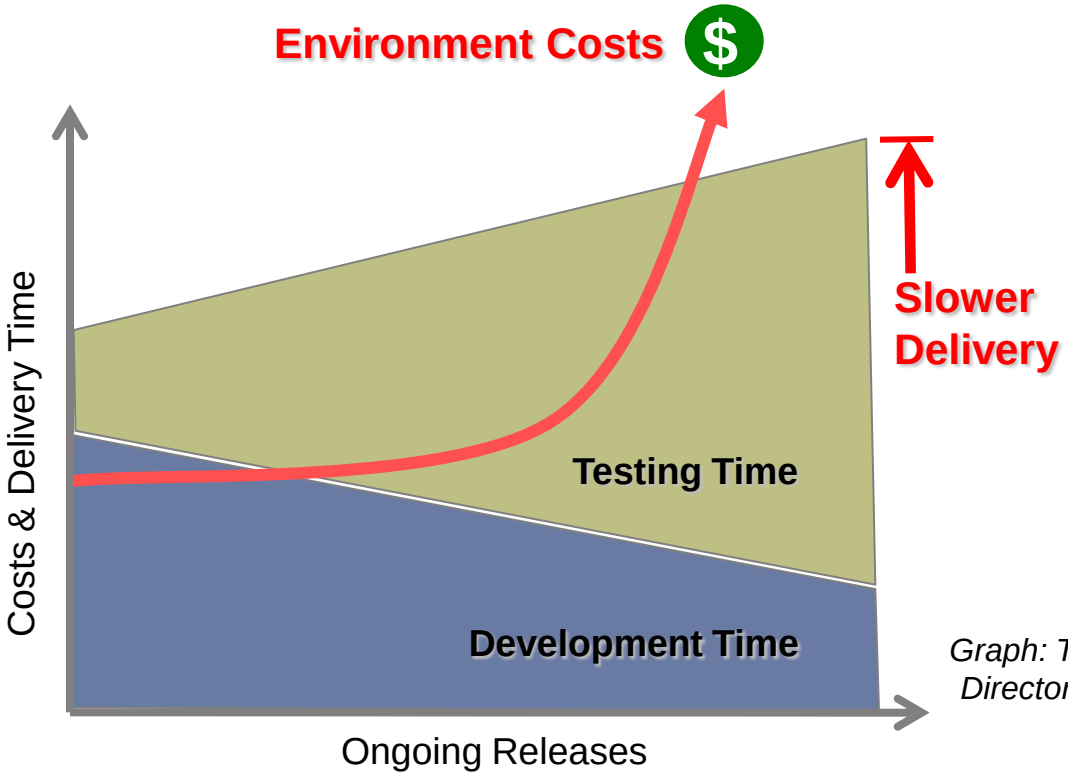


Modern Application Architectures



# of Interconnected Components	# of Inter-Dependent Teams	# of Heterogeneous Technologies	Rate of Change

Customers Are Experiencing Unintended Consequences



Graph: Tom Murphy, Gartner Research Director, Dec 9, 2009

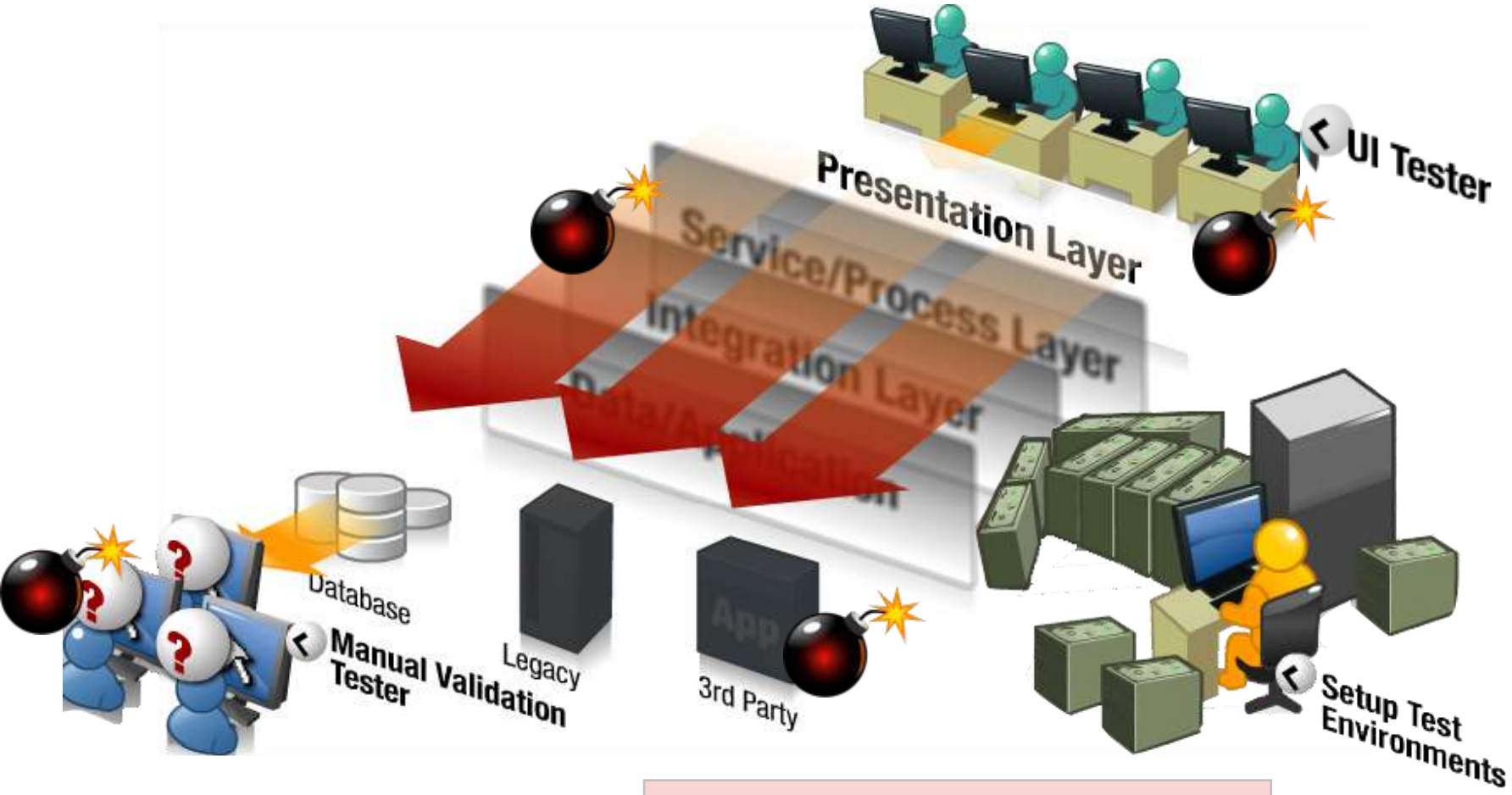
"Testing backlog is the single largest factor in the delay of new application deployments."

Source: IDC 2008

"Unplanned downtime" increased by 50% for SOA-based, loosely coupled applications.

Source: Gartner 2008

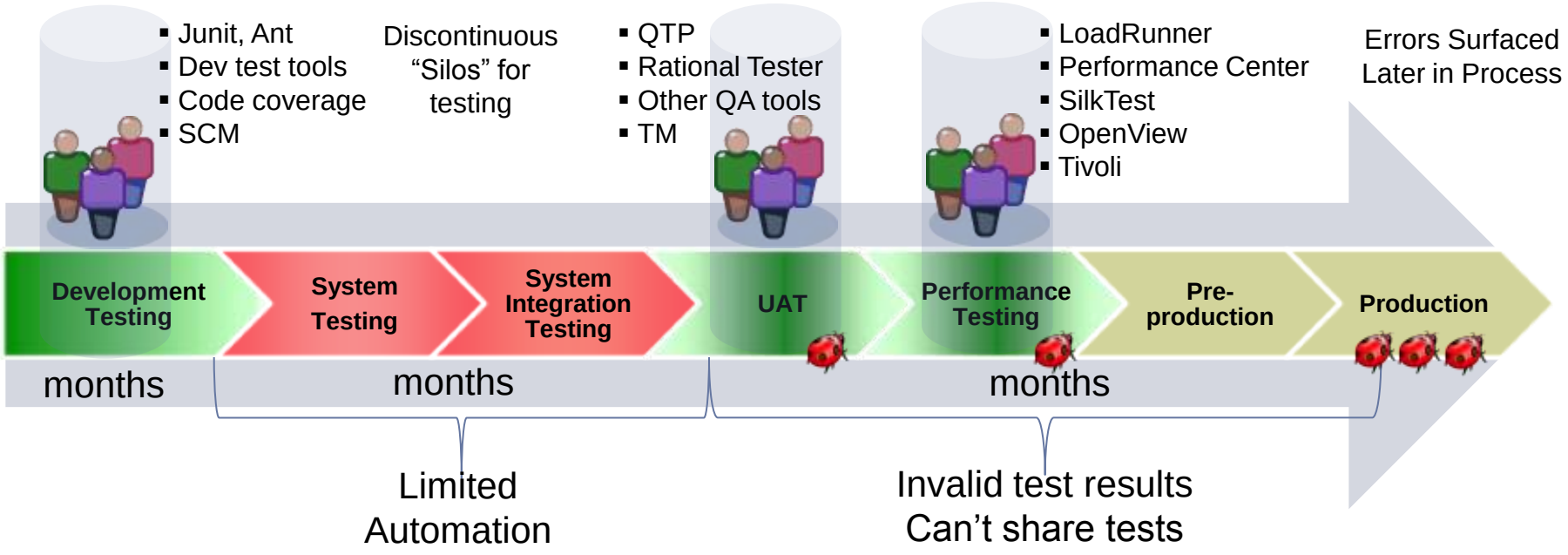
Traditional Testing Approaches for Distributed Applications *Don't Work*



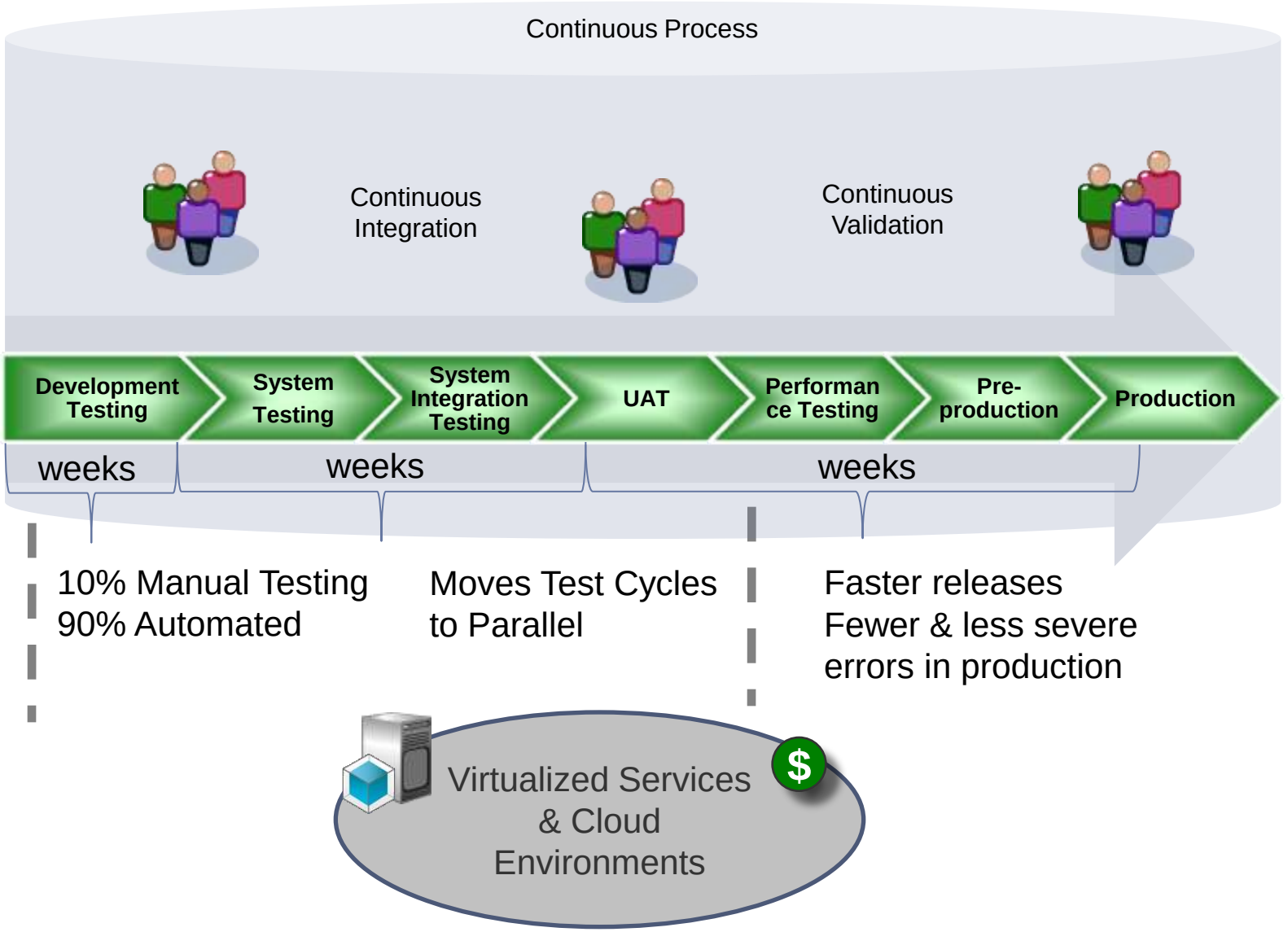
Lack of access and visibility creates environment costs

Why Traditional Approaches Fail

- Lack of early testing in the product-life-cycle
- Limited component & service layer testing
- Hardly any test automation in System Integration phase
- Complex architectures leads to inefficient QA
- Increase in number of production bugs
- Large number of environments required to complete all testing
- Longer release times hurting time to market



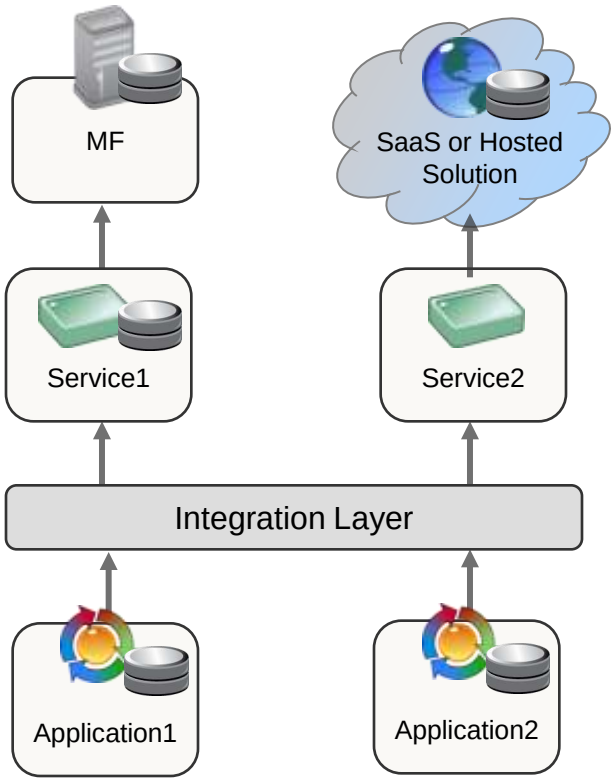
Quality for the Modern Application



Before Virtualization

Server Issues:
1. Access restricted
2. Capacity constraints
3. Data volatility
4. Security concerns

Service provider Issues:
1. Commingled services
2. Difficulties with parallel development of Apps & Services

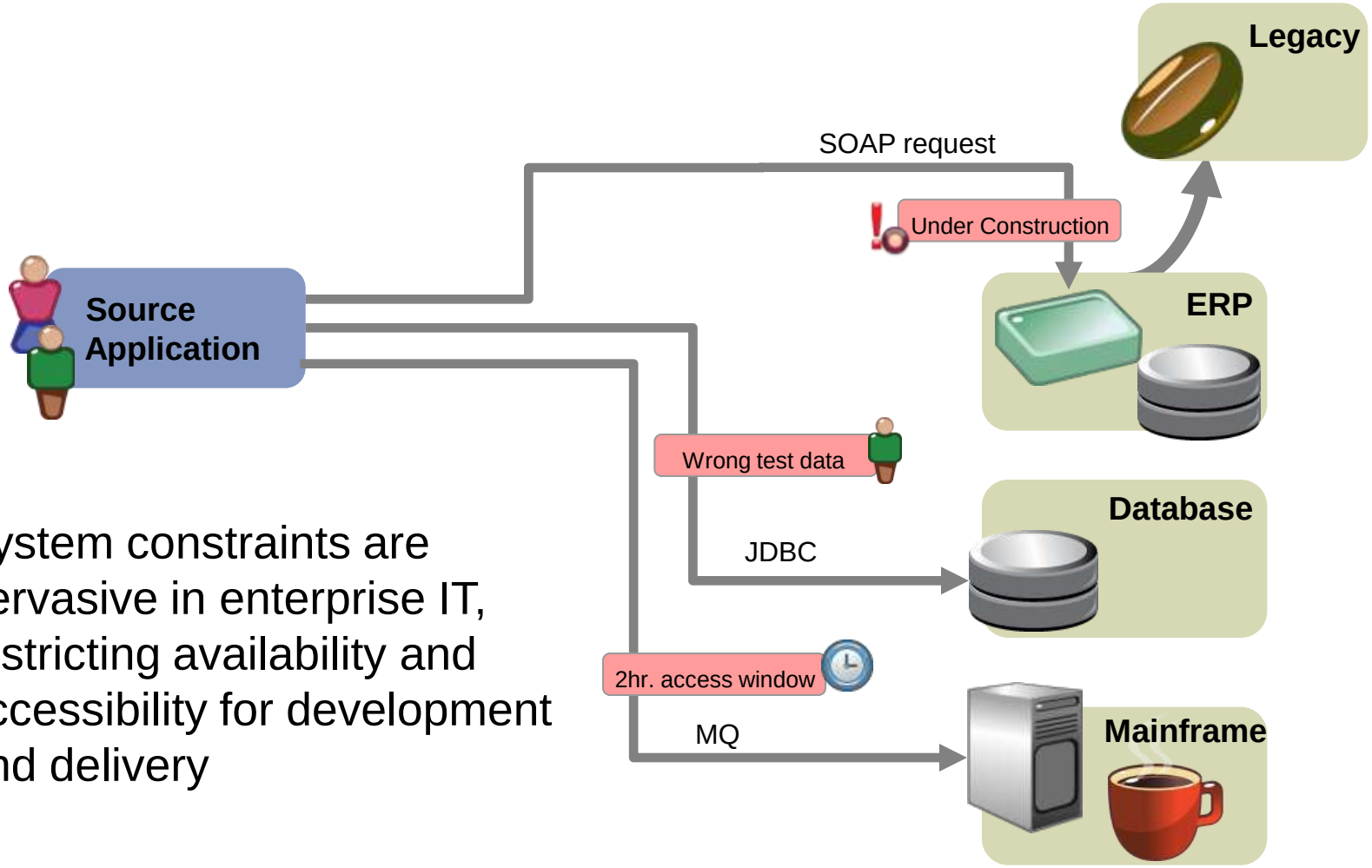


Cloud/SaaS Issues:
1. Access is costly
2. Data volatility

App Team Issues:
1. Every App team needs their own infrastructure
2. Every discipline (Dev, Test, Int) wants their own environment.

Net Effect of these issues:
- Server Proliferation
- Lost productivity in development
- Greater cost from 3rd party systems
- Increased risk of production issues

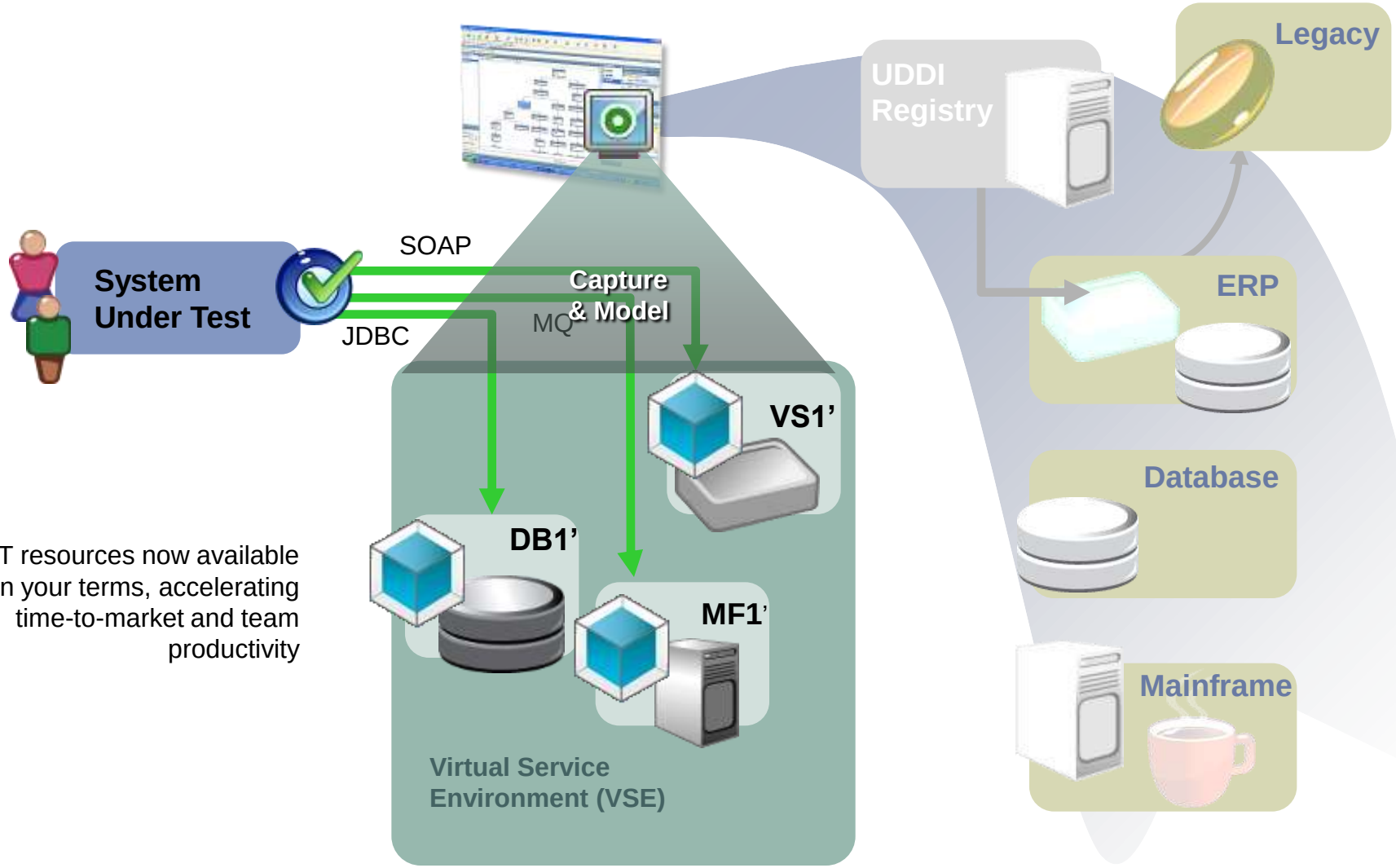
Constraints Example



System constraints are pervasive in enterprise IT, restricting availability and accessibility for development and delivery

Solution: Virtualize the Environment

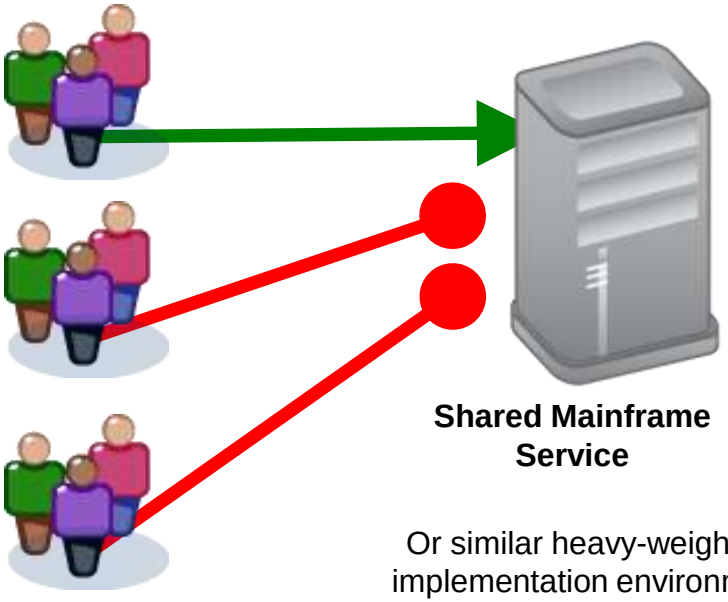
Capture and Model Behavior and Data of Dependent Systems



IT resources now available on your terms, accelerating time-to-market and team productivity

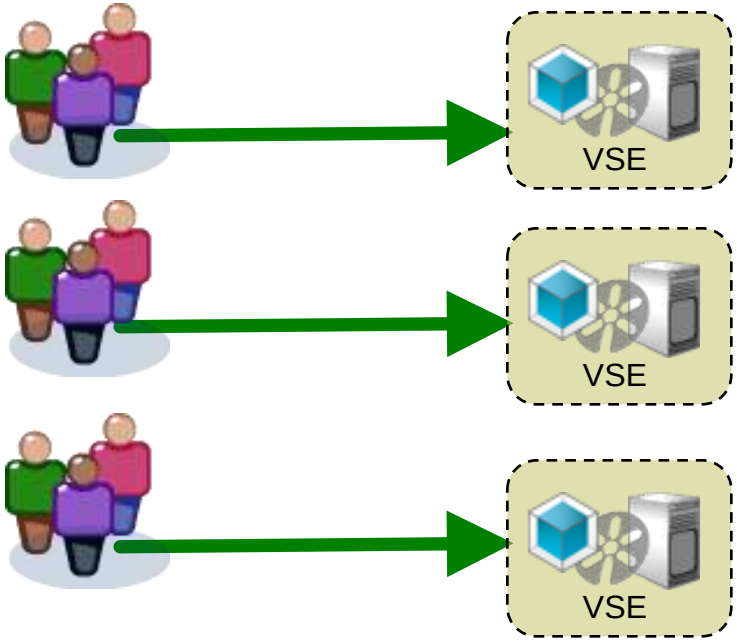
Eliminate Capacity Constraints

Major North American Bank



Shared Mainframe Service

Or similar heavy-weight implementation environment



Before ← → After

Business Problem

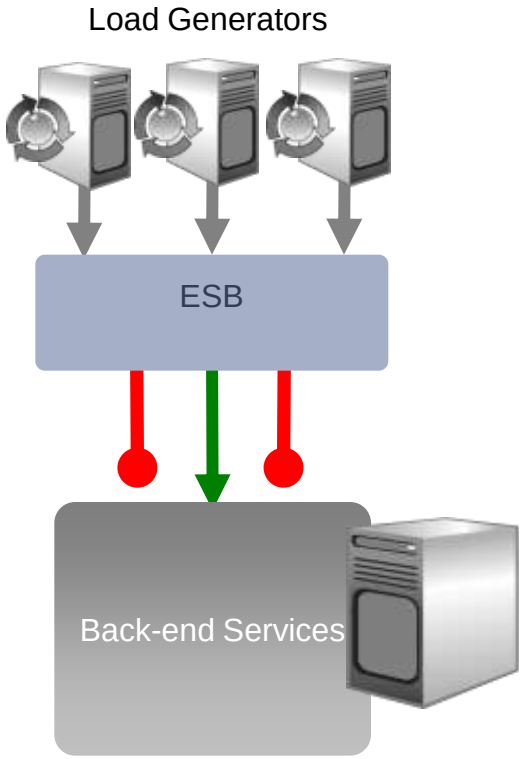
- **13 client teams forced to timeshare on a mainframe-based service**
- **Agility and time-to-market inhibited**

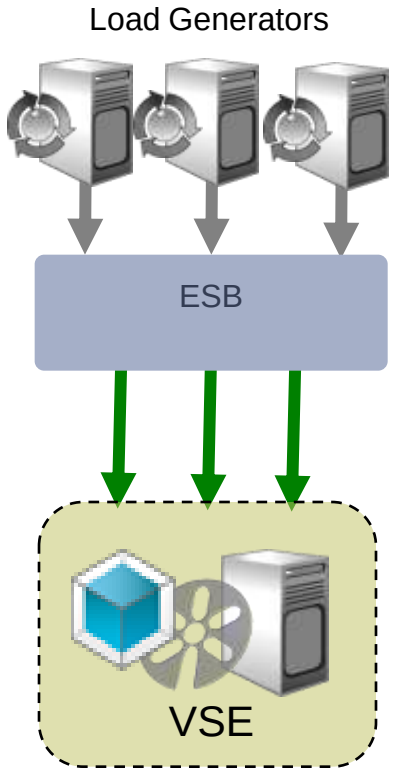
Business Impact

- **Able to complete 20% more projects per year**
- **Able to avoid $15M MF expansion**

Eliminate Capacity Constraints

Major US Bank – Performance Testing





Before ← → After

Business Problem

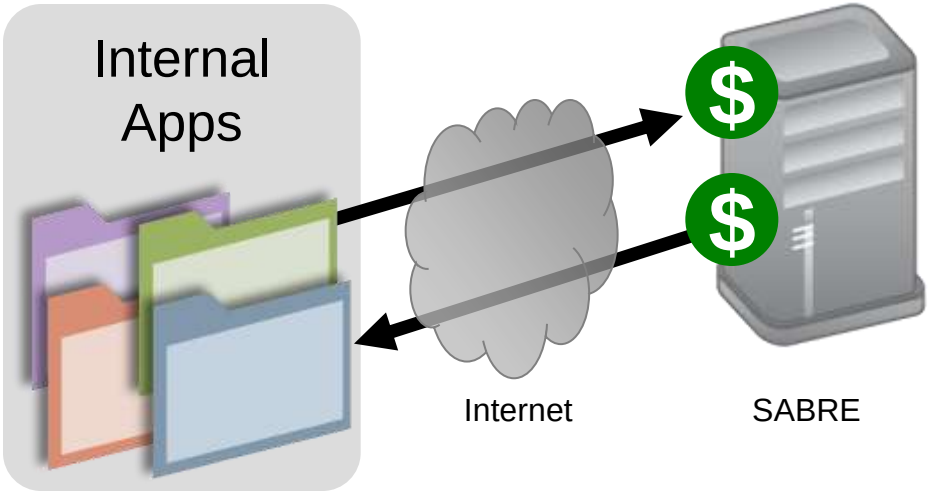
- **Limited capacity on test instances of Back-end Services**
- **Unable to sufficiently test ESB for performance**

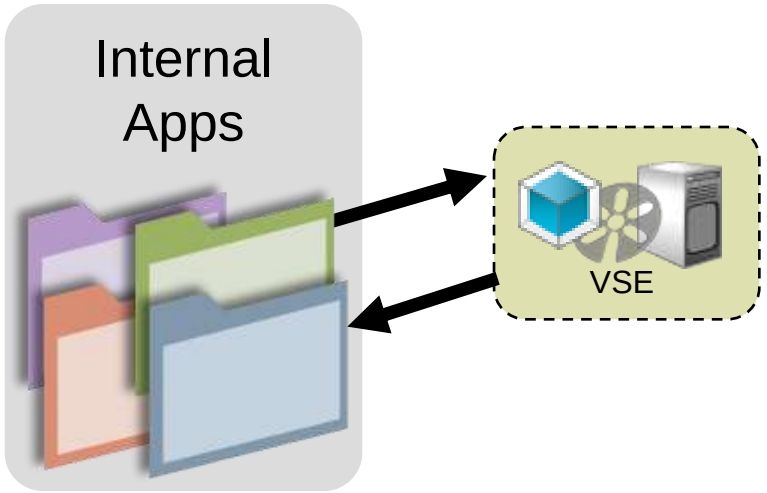
Business Impact

- **More complete SLA testing in less time**
- **Reduce cost of Performance testing by $700K/year**

3rd Party Expense Reduction

Major US Airline





Before After

Business Problem

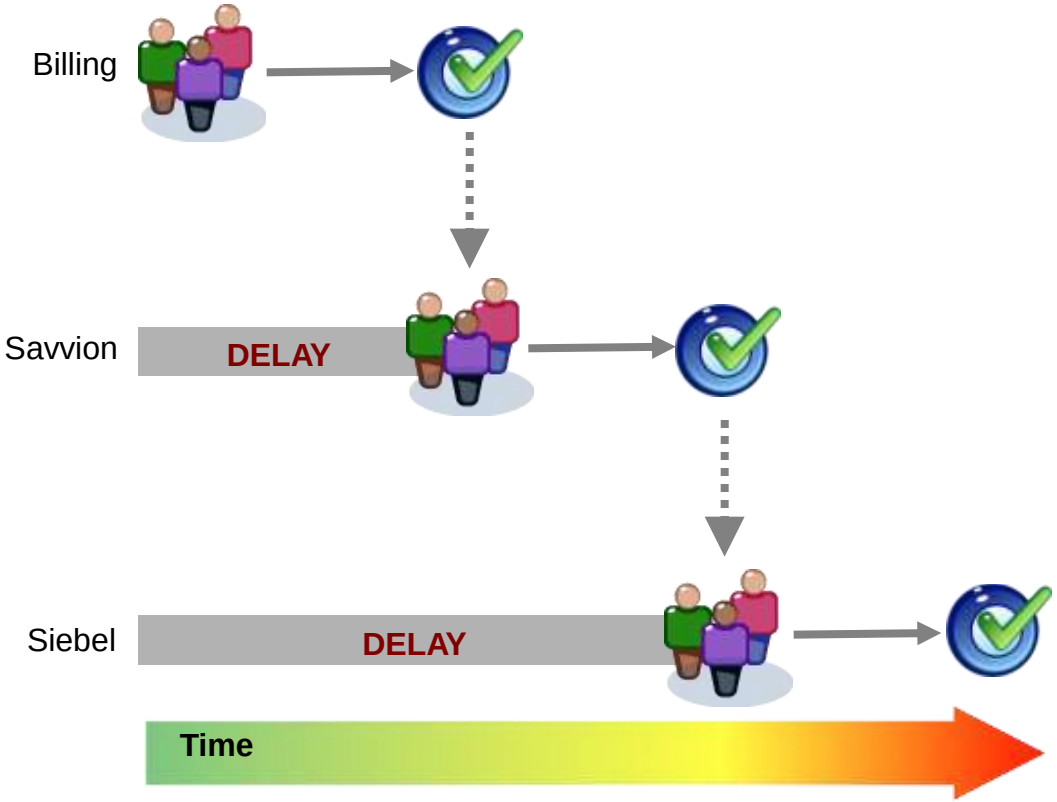
- **SABRE charges per transaction**
- **Testing and training environments generating high volumes of transactions**

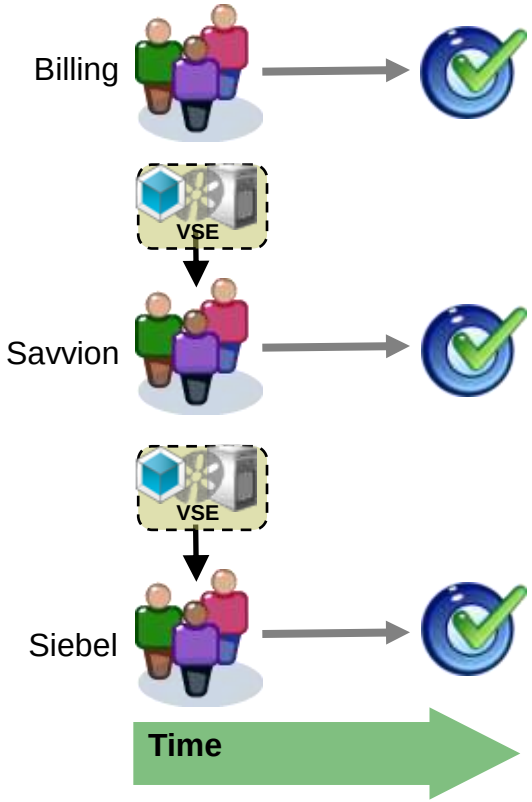
Business Impact

- **Eliminated need to process against SABRE for most testing and training needs**

Accelerate Parallel Development

Major US Telecommunications Company





Before ← → After

Business Problem

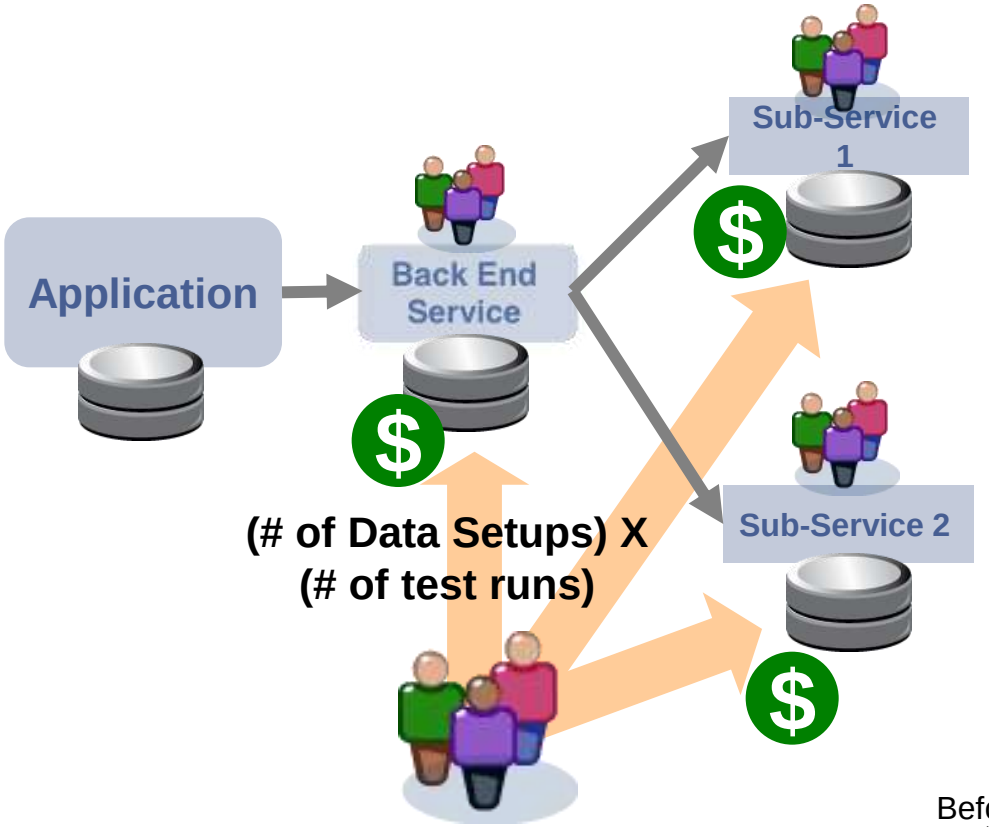
- Client systems waiting for server systems to deliver first
- Software changes taking too long

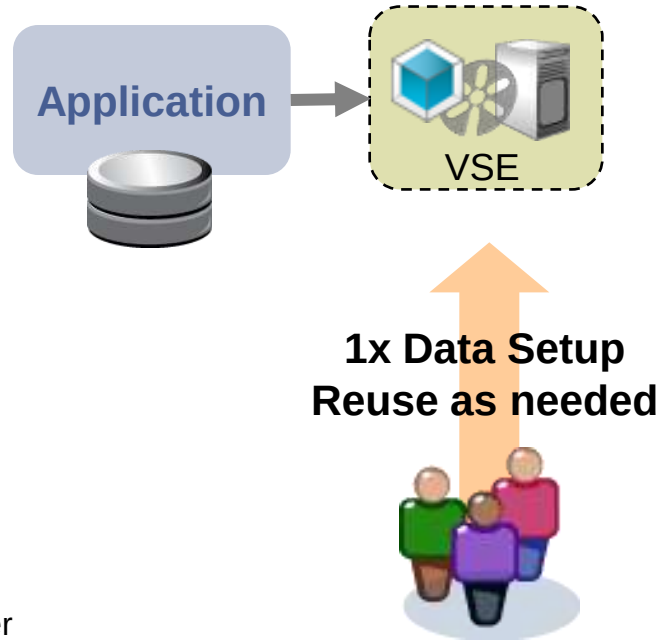
Business Impact

- Reduced Development Cycle by 3 months by modeling dependencies as Virtual Services

Simplify Data Management

Major US Telecommunications Company





Before ← → After

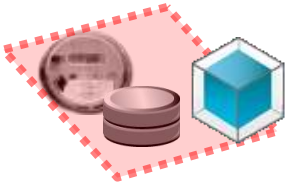
Business Problem

- Test cases must repeat data setup for every system they touch
- Other users may accidentally overwrite

Business Impact

- Setup tests with less effort
- Reset and repeat tests at will

How can iTKO Help?



Questions?

iTKO Contacts

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